

## **Stormwater Rulemaking Options within the Chesapeake Bay Watershed**

### **2. Options for Requiring Retrofits within the Chesapeake Bay Watershed**

7 The attachment includes specific language contained in the Final Phase I State WIPs. For each state, language that mentioned retrofits or reducing existing stormwater discharges was copied and pasted into this document.

Although several states did make reference to retrofit programs, in most cases there is not sufficient language included to accurately describe or glean the concepts of the retrofit program. Instead, most states simply refer to the retrofits as part of their contingency plan.

DC, however, has very specific performance metrics for retrofit projects as part of their Draft 2010 MS4 Permit discussion.

Maryland lists examples of retrofit performance criteria as well as descriptions of retrofit requirements within their MS4 permits. These retrofit requirements are based on impervious surface area that lack stormwater management controls have minimal controls.

## Chesapeake Bay Watershed Stormwater Preliminary Retrofit Considerations and Relevant WIP Information

### DELAWARE

#### SUMMARY

They have determined that retrofits are not a viable solution to improving stormwater management except for the draft New Castle County/DOT permit coverage area. They do, however, mention that retrofits "could" be considered for non-single family land uses," but do not commit to any specific action.

#### RELEVANT WIP INFORMATION

- *"Specifically within the Chesapeake Bay Watershed communities, DNREC has determined by analyzing land use patterns, that retrofits are not the solution to reduction of pollution loading in this area; however, within the new draft Phase I MS4 permit for New Castle County/DelDOT with portions of that permit area lying within the Chesapeake Bay Watershed, a retrofit program is required as part of this permit. DNREC is also considering requiring similar programs as part of all Phase II requirements as permits are renewed in the future." <Delaware's Phase I WIP, page 71>*

### DISTRICT OF COLUMBIA

#### SUMMARY

They state that they "plan to establish aggressive performance metrics for retrofit projects." They have a discussion related to the draft 2010 MS4 Permit, incentive programs for homeowners and other property owners, voluntary programs, and catch basin cleaning, replacement, and retrofit.

#### RELEVANT WIP INFORMATION

- **"Draft 2010 MS4 Permit"**  
*We also plan to establish aggressive performance metrics for retrofit projects (such as counting square footage proportionate to the percentage of the retention standard achieved for projects that retain less than that standard, and counting for removal of impervious surface). We plan to aggressively manage runoff from millions of square feet of impervious surfaces over the Permit Term, with approximately 1,500,000 square feet of impervious surface to be located in transportation rights-of-way.*

*We will continue with our vigorous Tree Canopy goal, increasing the tree canopy coverage within the District from 35% to 40% over twenty five years. This will include strict new requirements for improved tree boxes, in the manner that will achieve optimal stormwater retention and tree survival rate. Another element calls for installing at least 350,000 square feet of green roofs over the Permit cycle on District properties during the term of the Permit (including schools and school administration buildings). We are working proactively with our District sister agencies to promote LID wherever structurally and fiscally feasible. To better track these efforts DDOE will document the square footage of green roof coverage in the District, whether publicly or privately owned, report any incentive programs implemented during the Permit term, and estimate the volume of stormwater that is being removed from the MS4 system (and combined system, as relevant) in a typical year of rainfall as a result of the combined total green roof facilities in the District. The District agrees with EPA to require the use of green infrastructure and LID practices to reduce stormwater runoff from new development and redevelopment, to the maximum extent technically feasible. DC has plans for 1.2 million square feet (sf) of green roofs to be constructed by 2015, as follows:*

- 450,000 sf on District Property
- 408,000 sf on Federal
- 430,000 sf on Private
- RiverSmart Green Roof subsidy program is:
  - \$7 per square foot subsidy for large (> 4,000 sf) retrofit projects
  - \$5 per square foot subsidy open to any applicant for new or retrofit, public or private



- Green roof locations throughout the District as of June 2010, current estimates put installations at 600,000 sf (200,000 sf were installed in 2009 alone). This is counted towards the 1.2 million sf by 2015 goal.
- Tree Canopy Goal: increase cover from 35% to 40% of city coverage by 2035" <District of Columbia's Phase I WIP, page 40>

- **"RiverSmart Homes.** RiverSmart Homes is an incentive-based program "designed to encourage residential property owners to adopt stormwater management practices that will reduce non-point source pollution from their properties" (DDOE 2009a). Homeowners can receive up to \$1,200 to install landscape enhancements. Homeowners can select from one or more of the following options: shade trees, rain barrels, pervious pavers, rain gardens, and BayScaping. The program began in 2008 as a pilot project in the Pope Branch subwatershed of the Anacostia River. It has since been expanded to the entire District. (DDOE 2009b) To date 1,214 audits have been completed, 725 rain barrels have been installed, 266 trees have been planted, 82 rain gardens have been installed, 25 pervious paver projects and 142 BayScaping installations have been planted. More than 2,000 homeowners are interested in the in the RiverSmart Homes Program and are on a waiting list to have an audit performed for their property. DDOE expects the program to grow as homeowners become aware of the impervious area stormwater management fee, which is discussed in detail in Section 7.2.6.

DDOE intends to expand the program to include a web-based tool to educate homeowners about stormwater pollution on the property and provide follow-up information for homeowners already participating in the program. The follow-up information will provide guidance on proper care and maintenance for their landscaping enhancements and will encourage them to install additional BMPs on their property (DDOE 2009b)." <District of Columbia's Phase I WIP, page 44>

- **"RiverSmart Rooftops.** RiverSmart Rooftops is an incentive program through the DDOE to help reduce stormwater runoff by providing subsidies to property owners who install a green roof. For projects up to 4,000 square feet of vegetated surface, there is a rebate of \$5 per square foot, with each property being eligible for up to \$20,000. These projects can be installed on new or existing properties. For projects over 4,000 square feet of vegetated surface, there is a rebate of \$7; however, only existing properties are eligible. An analysis of green roof performance indicates that green roofs can retain 50-75 percent of the total rainfall over a year (Johnson 2008). In the District, this translates to 15 gallons of stormwater per square foot of green roof coverage or 630,000 gallons per acre (Johnson 2008).

Green roofs that are a part of new construction in the District are tracked in DDOE's Plan Review Database. Green roofs that are installed as a retrofit are tracked by participation in the RiverSmart Rooftops incentive program and by installations by municipal partners. Eleven green roofs totaling 287,491 square feet were approved in FY08 and thirteen green roof projects for a total of 101,766 square feet were approved in FY09. These projects will bring the District's total square footage of green roofs to 720,735 square feet. Nineteen of these projects are in the CSO portion of the city, while 5 of them are in the MS4 portion (DDOE 2010c). Commitments are in place to raise the green roof coverage in the District to 1.3 million square feet in 2012. In 2009 Green Roofs for Healthy Cities awarded the District second place (behind Chicago) for most installations in 2009." <District of Columbia's Phase I WIP, page 44>

- **"Catch Basin Cleaning, Replacement and Retrofits**  
By trapping coarse sediment and trash and debris, stormwater catch basins help prevent these solids from being washed into local waterways. However, catch basins must be cleaned periodically if they are to maintain their solids-trapping functionality. The DC WASA is responsible for catch basin maintenance in the District. District catch basin maintenance increased between the mid-nineties and the year 2000. The number of catch basins cleaned and repaired has remained relatively constant since 2000. There are approximately 24,000 catch basins within the public rights-of-way in the District, about half of these are in the MS4 area (DDOE 2009a). DC WASA is responsible for the maintenance of all those located in the MS4 and CSO areas of the District (DDOE 2009a). When a roadway undergoes total reconstruction, the catch basins are replaced with water quality or environmental catch basins that remove more pollutants than a conventional catch basin (DDOE 2009a). Additionally, all catch basins are cleaned on an annual basis, with additional cleaning by customer request (DDOE 2009a). All catch basin locations have been geo inventoried and added to a GIS dataset. DDOE uses this information to track and organize volunteer storm drain stenciling activities, which are conducted on a subwatershed basis (DDOE 2009a). DDOE is also working to improve catch basin water quality performance by retrofitting catch basins with filters, sponge inserts and trash screens (DDOE 2009a)." <District of Columbia's Phase I WIP, page 45>

- **"Funding Capacity**



...DDOE is finalizing a Stormwater Fee Discount Program. This program will provide financial incentive for stormwater retrofits, by reducing the stormwater fees of property owners that install stormwater management practices. Eligible practices will be focused on practices that reduce the volume of stormwater runoff generated, such as bioretention, permeable pavements, green roofs, etc. DDOE expects to publish the details of this Discount Program for public comment in late 2010. Assuming that the final MS4 Permit for the District is essentially equivalent to the draft MS4 Permit, DDOE expects there to be a moderate increase in MS4 program expenditures during the next permit cycle. These expenditures will be funded through the DDOE stormwater fee. If the federal government and all other ratepayers continue to pay the stormwater fee, with a moderate upward adjustment, DDOE would have sufficient revenue to cover these expenditures." <District of Columbia's Phase I WIP, Contingencies, page 56>

➤ **"Voluntary programs**

Meeting the sediment allocation targets will rely heavily on reductions from nonpoint source areas. The District is relying on efforts by the federal facilities to make additional reductions in sediment. The District needs commitments from federal facilities to implement BMPs, LIDs and retrofits on their properties to control stormwater runoff. In particular, the District needs the federal facilities to plant trees and install regenerative stormwater conveyances." <District of Columbia's Phase I WIP, Contingencies, page 82>

## MARYLAND

### SUMMARY

Have retrofit requirements and lists how they will be credited. They also list alternative urban BMPs that could count towards possible retrofit credit. Renew SHA MS4 Phase I and II permit to require Nutrient and Sediment reductions equivalent to stormwater treatment on 30% of the impervious surface that does not have adequate stormwater controls Develop work plan to meet nutrient and sediment reduction goals through system retrofitting and equivalent alternative practices and trading in 2011.

### RELEVANT WIP INFORMATION

Strategy	Description	Units	2010-2011	2012-2017	Total	Estimated Cost
Urban Stormwater						
SHA MS4 Phase I and II	Renew permit to require Nutrient and Sediment reductions equivalent to stormwater treatment on 30% of the impervious surface that does not have adequate stormwater controls. Develop work plan to meet nutrient and sediment reduction goals through system retrofitting and equivalent alternative practices and trading in 2011. Alternative practices include forest buffer planting, stream restoration, wetland restoration, pavement removal and operational practices. Selection of practices and timing of implementation will be based on cost-effectiveness, pollutant removal efficiency and maximizing available funding.	Load reduction equal to 30% per-1985 impervious surface acres	0% MS4 Phase I 0% MS4 Phase II	30% in MS4 Phase I areas 20% in MS4 Phase II areas	30% in MS4 Phase I areas 20% in MS4 Phase II areas	\$1.0 B

<Maryland's Phase I WIP, Maryland Watershed Implementation Plan: Summary Table of Strategies, page ES-15>

➤ **"Reasonable Assurance**

Outlining a strategy to ensure available funding for stormwater controls. In 2011, Maryland commits to convening formal discussion with stakeholders to determine funding options, schedules, and most cost effective practices with local government. In 2012, if the creation of local utilities or other systems of charges to support stormwater programs such as those that currently exist in 5 Maryland jurisdictions, is not underway, Maryland will seek legislation requiring development of local stormwater utilities. Alternative cost effective practices include forest buffer planting, stream restoration, wetland restoration, pavement removal and operational practices. Selection of practices and timing of implementation will be based on cost-effectiveness, pollutant removal efficiency and maximizing available funding. The State Highway Administration which also complies with this requirement has determined that based on rough cost estimates, the use of cost effective practices which achieve the same reduction in pounds of pollutants, may reduce costs by as much as two-thirds. The State also commits to pursue federal funding for stormwater projects on three tracks: a federal funding authorization, a formal agreement for retrofits at federal facilities and a commitment from the U.S. Army Corps of Engineers." <Maryland's Phase I WIP, Reasonable Assurance, page ES-27>



➤ **“Compliance Capacity for MS4s and Stormwater Retrofits**

Maryland's urban stormwater retrofit program and performance standards are based on a mix of State and federal voluntary and regulatory efforts, and will be adjusted as needed toward meeting Chesapeake Bay TMDLs. Maryland began a voluntary retrofit program in 1984, known as the Stormwater Pollution Control Cost Share Program. This program was expanded in the 1990's with the Small Creeks and Estuary Cost Share Program, and again in 2010 with the Chesapeake Bay Trust Fund. Thousands of urban acres across the State have been retrofit with these funds... Maryland has written watershed retrofit requirements into NPDES municipal stormwater permits since 1999. These retrofit requirements are based on existing impervious surface area with no or minimal stormwater management. An example of a comprehensive watershed retrofit program and associated BMP data can be found in Baltimore County's most recent NPDES annual report Appendix (WIP, Appendix G2). Previously, 10% of a jurisdiction's unmanaged urban areas were required for retrofitting during a five year permit term. The current round of permits, which began with Montgomery County in February 2010, require that an additional 20% of a jurisdiction's unmanaged impervious area be treated. <Maryland's Phase I WIP, Current Capacity, page 2-25>

➤ **Stormwater Retrofit Performance Criteria**

The following is a list of alternative urban BMPs that the stormwater workgroup has identified for possible retrofit credit:

Stream restoration	Pet/animal waste
Outfall stabilization	Regenerative outfalls
Urban forest buffers	Removal of impervious surfaces
Stormwater management by era	Impervious surface disconnects
Wetlands restoration	Downspout disconnects
Forest conservation	Rain barrels and rain gardens
Tree planting	Septic system upgrade
Urban nutrient management	Agricultural BMPs
Trash removal	Redevelopment and land use policies
Education	Public outreach and stewardship
Street sweeping	Disconnection of illicit discharges
Inlet cleaning/vacuuming	Floodplain restoration
Watershed association activities	Reduction in vehicle trips
Sub-soiling	Meadow creation
Shoreline erosion control	Lawn fertilizer reduction
Urban growth reduction	Land conservation

<Maryland's Phase I WIP, Current Capacity, page 2-26>

## NEW YORK

### SUMMARY

As a contingency, the state will consider information regarding the effectiveness of retrofit practices. They currently have retrofits listed as one example of enhanced requirements for reasonable potential areas.

### RELEVANT WIP INFORMATION

➤ **“Enhanced Requirements for Reasonable Potential Areas**

For areas where NYSDEC has determined stormwater discharges are a significant portion of the loading to waters with the reasonable potential to violate water quality standards. NYSDEC has included enhanced requirements for MS4s. Those requirements depend on the nature and degree of pollutant contributions for a particular watershed that must meet the enhance requirements. The types of enhanced requirments include septic inspections, small construction project review (5000 sq ft to one acre), enhanced treatment, **retrofits**, pet waste programs, goose population management, sewer system mapping, catch basin cleaning and enhanced public education programs.” <New York Phase I WIP, page 112>

➤ **“Contingencies for Slow or Incomplete Implementation, Urban Runoff**



*Evaluate potential MS4 Enhancements: ...Consider information USEPA R3 contractor is developing regarding the cost and effectiveness of urban retrofit practices, including tree planting, riparian buffers, and green infrastructure, to provide guidance to municipalities regarding the implementation of practices that may meet the "maximum extent practicable" standard." <New York Phase I WIP, page 130>*

## PENNSYLVANIA

### SUMMARY

There is a suggestion to identify and prioritize existing developments with no stormwater controls as "potential" targets for stormwater retrofit, but no commitment.

### RELEVANT WIP INFORMATION

➤ **"Gap Analysis, BMP maintenance and establishment**

*Identification and prioritization of existing developments with no stormwater controls as potential for stormwater retrofit" <Pennsylvania Phase I WIP, page 144>*

## VIRGINIA

### SUMMARY

Admits that new activities are needed to address sediment and nutrient loads associated with existing development, but it lacks specificity describing what actions they are planning to undertake. They also state that localities have the ability to adopt stricter measures such as ordinances to require the installation of stormwater controls in existing urban areas as well as more stringent criteria to control water quality and quantity. (However, they do not have assurance that these actions will happen.)

### RELEVANT WIP INFORMATION

➤ **"Strategy to Fill Gap**

*The new stormwater regulations will not address sediment and nutrient loads associated with existing development, nor does the existing Chesapeake Bay Preservation Act. To fill this gap, new requirements, as well as financial incentives for stormwater BMPs is needed. In addition, the new stormwater regulations are expected to require a 20% reduction in phosphorus loads for areas undergoing redevelopment...*

*...Section 10.1-603.7 of the Stormwater Management Act authorizes localities to adopt a more stringent stormwater management ordinance to ensure compliance with the act and attendant regulations. This section also provides guidance under which conditions a locality can adopt a more stringent ordinance. So, localities have the opportunity to develop stricter ordinances requiring the installation of BMPs in existing urban areas, in addition to more stringent criteria for water quality and quantity control to meet the allotted loads and wasteloads for the segment shed...*

*...The Commonwealth will utilize MS4 permits to assure BMP implementation on existing developed lands to achieve nutrient and sediment reductions equivalent to Level 2 (L2) scoping run reductions by 2025 for state and local MS4 operators. Level 2 implementation equates to an average reduction of 9 percent of nitrogen loads, 16 percent of phosphorus loads and 20% of sediment loads from impervious regulated acres and 6 percent of nitrogen loads, 7.25 percent of phosphorus loads and 8.75 percent sediment loads beyond 2009 progress loads and beyond urban nutrient management reductions for pervious regulated acreage...*

*...The Commonwealth will utilize MS4 permits to assure BMP implementation on existing developed regulated federal lands to achieve nutrient and sediment reductions equivalent to Level 3 scoping run reductions by 2025. Level 3 implementation equates to an average reduction of 18 percent of nitrogen loads, 32 percent of phosphorus loads and 40 percent of sediment loads from impervious regulated acres and 12 percent of nitrogen loads, 14.50 percent of*



phosphorus loads and 17.5 percent of sediment loads beyond urban nutrient management reductions for pervious regulated acreage." <Virginia's Phase I WIP, pages 89-93>

## WEST VIRGINIA

### SUMMARY

In the contingency section of the WIP, they state they will "require" retrofits to capture 0.80" of rainfall on site.

### RELEVANT WIP INFORMATION

*"Non-regulated Developed Lands, Contingencies (if "no net increase" not achieved; 2015 assessment) : Use Residual Designation Authority for MS4 in Jefferson County if 2010 census doesn't require; Pursue statewide Stormwater Management Program with post-construction requirements if EPA Nationwide regulations not finalized; Required retrofits for MS4." <West Virginia's Phase I WIP, Section 7. Developed Lands & Industrial, page 29>*

*"As detailed in the following section, WVDEP will evaluate the effectiveness of MS4 controls by December 31, 2015. If the no net increase in delivered nitrogen and phosphorus to the Chesapeake Bay from urban areas is not being met, WVDEP will implement these contingencies by December 31, 2017: WVDEP will require the necessary level of retrofits in Chesapeake Bay watershed MS4s it determines are necessary to attain wasteload allocations. These retrofits will meet the capture requirement of .80 inches of rainfall on site with no discharge to surface waters. Pursuant to Part III.D.1 and D.2 of the existing permit, permittees are required to achieve wasteload allocations of any applicable TMDLs. Upon demonstration of noncompliance, WVDEP will require SWMP modification to include retrofits. No modification to the MS4 general permit is necessary to implement this contingency." <West Virginia's Phase I WIP, Section 7D.e, Contingencies, pages 40-41>*

*"WVDEP is currently developing a standardized form for Chesapeake Bay MS4s. This form includes additional information regarding monitoring and tracking of implementation of their runoff reduction practices. Chesapeake Bay MS4s will report the number of acres newly developed/redeveloped, the landuse on which the new development/redevelopment occurred, and the list of runoff reduction practices installed to meet the 1 inch capture requirement. Retrofits would also be included in this reporting." <West Virginia's Phase I WIP, Section 7D.f, Tracking and Reporting Protocols>*

*"Financial. Funding from the Chesapeake Bay Program is vital to maintain the capacity we have built, and to adaptively manage to increase capacity as needed. Grant funds seem to be sufficient for demonstration projects, and we have noticed NFWF Chesapeake Stewardship Funds being awarded for the top retrofit projects in communities where prioritized lists exist. However, none of our communities have developed such a list, nor have they successfully accessed those grant funds for that purpose." <West Virginia's Phase I WIP, Section 7E.a, Current Programs & Capacity, page 46>*

*"Gap Analysis. West Virginia has many gaps between the existing capacity to reduce loads from developed lands and the ability to do so. There is no requirement at the state or county level to regulate post construction stormwater on new or redeveloped sites outside of MS4 areas or to retrofit existing developed areas to better treat stormwater runoff. In addition, there is no regulation of residential lawn fertilizer and no limits of oversized lawns. Excess runoff coupled with over-fertilization can lead to nutrients entering our local waterways. While some counties have subdivision and stormwater ordinances, we need to investigate in Phase II how these complement our WIP strategy. Implementing stormwater controls when constructing a new facility is less costly than attempting to retrofit a site that isn't otherwise undergoing construction." <West Virginia's Phase I WIP, 7E.c. Gap Analysis, page 47>*



**“Regulatory.** There are currently no stormwater utilities in the Potomac basin. Enabling of stormwater utilities will facilitate the establishment of a dedicated funding stream to address stormwater priorities such as maintenance and installation of stormwater management retrofits... There are no requirements for stormwater retrofits or enhanced stormwater management at re-development sites.” <West Virginia’s Phase I WIP, 7E.c. Gap Analysis, page 47>

**“Programmatic, Staffing & Technical Capacity .** Chesapeake Bay implementation has yet to become institutionalized on a local level. We know of no local governments in the Potomac Basin of WV that have used tools to plan ordinance revisions, outreach campaigns, or retrofit activities to optimize nutrient or sediment load reductions from such actions. We are aware of tools that might be applicable for these governments with some customization required, but local governments have not asked for assistance with obtaining or using them.” <West Virginia’s Phase I WIP, 7E.c. Gap Analysis, page 48>

**“Financial.** Currently, none of the towns or counties in the Potomac Basin of West Virginia has a stormwater fee that could be used for local government staff dedicated to reducing stormwater impacts, to retrofit, install and maintain practices described in this section, or to pay for broad-based homeowner BMP incentive programs. Significant progress in the non-regulated developed lands sector will be dependent upon actions and programs established using fee-based funding at the county and municipal level.” <West Virginia’s Phase I WIP, 7E.c. Gap Analysis, page 49>

**“Local Governments/Land Use Planning.** ...Enable counties and municipalities to form stormwater utilities to maintain stormwater practices and to fund stormwater retrofits ... <West Virginia’s Phase I WIP, 7E.d. Strategy to Fill Gaps, page 50>

**“Implementation of Specific BMPs.** Assign staff person or group(s) to track and ensure increased acreage treated by infiltration and filtering practices occurs in each county. Use 319, Bay Implementation, and Stream Partners grants to fund individual projects at minimal or partial cost to landowner

- The projects aimed at runoff reduction at public facilities should have the effect of achieving some of these acreages
- Some communities would benefit from formal prioritized inventories of retrofit opportunities, to enable them to qualify for NFWF grants, etc.” <West Virginia’s Phase I WIP, 7E.d. Strategy to Fill Gaps, page 51>

**“Homeowner Engagement.** Install homeowner rain gardens in several of these sites along well-traveled routes...Institute homeowner runoff reduction campaign to recruit homeowners to disconnect downspouts, help them install rain barrels, create swales, rain gardens and other small-scale runoff reduction practices. Voluntary pledges of maintenance would be encouraged...” <West Virginia’s Phase I WIP, 7E.d. Strategy to Fill Gaps, page 51>

**“Education, Outreach & Technical Assistance.** ...Develop campaign to encourage installation of more stormwater retrofits...Develop campaign to encourage installation of enhanced stormwater management practices at re-development sites <West Virginia’s Phase I WIP, 7E.d. Strategy to Fill Gaps, page 52>



**CURRENT REGULATORY LANGUAGE:** No specific requirements in the regulation.

**GUIDANCE:** In choosing appropriate BMPs, EPA encourages you to participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens.

**POSSIBLE NEW LANGUAGE:** Retrofit plans must be developed as described in Part X. For MS4s that discharge to the Chesapeake Bay watershed, <insert one of the following options>

- a. At least X% of their jurisdiction must be retrofitted to improve and protect water quality within X permit terms.
- b. At least X% of their jurisdiction must be retrofitted to improve and protect water quality within X permit terms.

The goal of the retrofit program must be to reduce the impact of stormwater in order to protect, maintain, and/or restore the chemical, physical, and biological integrity of receiving waterbodies. Retrofit projects must include at least one of the following objectives: reducing stormwater volume; removing stormwater pollutants; alleviating drainage problems; stabilizing stream bank erosion; stream restoration. Retrofits include activities and practices that promote infiltration, evapotranspiration, harvesting of stormwater, and/or reuse of stormwater.

Reporting requirements depend on the nature of the project, but must include the following metrics at a minimum: description of the activity, estimation of costs, pollutant loading reductions, volume reductions, and description of any maintenance frequencies and needs. These retrofits must be tracked and inspected by the MS4 in order to ensure that they are meeting the objectives and goals of the program.